

Abstract

Abstract: We consider an anisotropic brane world with Bianchi type I and V geometry where the mechanism of confining the matter on the brane is through the use of a confining potential. The resulting equations on the anisotropic brane are modified by an extra term that may be interpreted as the x-matter, providing a possible phenomenological explanation for the accelerated expansion of the universe. We obtain the general solution of the field equations in an exact parametric form for both Bianchi type I and V space-times. In the special case of a Bianchi type I the solutions of the field equations are obtained in an exact analytic form. Finally, we study the behavior of the observationally important parameters